ABSTRACT OF THE DISCLOSURE

METHOD, APPARATUS AND PROGRAM FOR MIGRATING BETWEEN STRIPED STORAGE AND PARITY STRIPED STORAGE

A mechanism is provided for migration between stripe storage and redundant parity striped storage. When a disk is added to a disk array, the mechanism migrates from RAID 0 to RAID 5. For each row, the mechanism calculates parity for the row and, if the parity position is not the new drive, the mechanism writes the data from the parity position to the new drive and writes the parity to the parity stripe position. If a drive fails, the mechanism migrates back from RAID 5 to RAID 0. For each row, if the parity position is not the failed drive, reads the data from remaining drives, XORs the data stripes to get failed drive data, and writes the failed drive data to the parity position. If a read or write is received for the failed drive, the mechanism simply redirects the read or write to the parity position.